

supply roller 111 and moved to conveyor unit 140. During use, a pressure plate 115 of sheet supply unit 110 moves sheets P up to contact supply roller 111. Supply roller 111 rotates to pick up a sheet P and to send sheet P to the conveyor unit 140. (Column 7, lines 2-8). Upon entering conveyor unit 140, sheet P travels between platen 149 and pinch roller guide 143 to the covey roller 141. (Column 7, lines 34-38). Due to the orientation of the supply roller 111 with respect to the sheets P, each sheet P passes between the supply roller 111 and the upper surface of the lower arm of the supply unit 110, i.e., the area cited by the Examiner as a first guide structure. (Final Office Action, attached drawing).

Assuming for argumentative purposes that the upper surface cited by the Examiner is the first guide structure of claim 14, the cited structure is clearly spaced downstream from the supply roller 111 to allow the leading edge of the sheets P to pass between supply roller 111 and the cited surface. Since the cited guide structure is spaced considerably downstream from supply roller 111, the media entrance of the media path formed between the first, i.e. cited, guide structure and any second guide structure is also spaced considerably downstream from supply roller 111, as noted on the attached Figure 7 of the Saikawa reference. Therefore, the media entrance is not adjacent supply roller 111. This is in direct contrast to the limitations of independent claim 14, which recite a media path between the first guide structure and the second guide structure that has a media entrance adjacent to the pick roller structure.

In fact, due to the positioning of supply roller 111 with respect to supply unit 110, the upstream edge of the cited first guide structure cannot be moved closer to supply roller 111 without obstructing the movement of the leading edge of the sheets P when contacted by the supply roller 111. Similarly, moving supply roller 111 closer to the cited first guide structure would decrease the area of supply roller 111 that contacts sheets P and, therefore, would likely lead to an increase in sheet picking and feeding problems, which would be in direct contrast to the stated purpose of the Saikawa reference (See Saikawa, Column 1-2). As a result, not only does the Saikawa reference fail to disclose a media entrance as defined in independent claim 14, but the Saikawa reference teaches away from modification to create such a media entrance. Accordingly, Applicants believe that the Saikawa reference fails to teach or otherwise suggest the Applicant's claimed invention of independent claim 14, thereby, rendering independent claim 14 allowable.

Claims 15 and 16 are rejected under 35 U.S.C. § 102(e) as being anticipated by the Saikawa patent. Each of claims 15 and 16 depend from independent claim 14, which, as described above, is not taught or otherwise suggested by the Saikawa reference. Therefore, dependent claims 15 and 16 in combination with independent claim 14 are also believed to be allowable over the art of record. In addition, claims 15 and 16 recite additional, patentably distinct subject matter. In particular, both claims recite the distance between the first and second guide surfaces is greater at the media exit than at the media entrance. The cited reference fails to teach such a limitation.

In particular, the Examiner cites the upper guide 148 as the first guide structure and the upper surface of the lower arm of sheet supply unit 110 as the second guide structure at the media entrance. (Final Office Action, p. 5 and attached figure). At the media exit, i.e., adjacent the drive roller, the first guide structure must be viewed as being the upper surface of the platen 149, and the second guide structure must be viewed as being the PE sensor spring 145 since the platen 149 and the spring 145 are the only structures lining the media path near the adjacent convey roller 141. Notably, as the sheet path nears convey roller 141, the pinch roller guide 143 gradually gets closer and closer to the platen 149. In contrast, at the media entrance, upper guide 148 is clearly spaced from the area cited by the Examiner as the first guide surface. As such, the distance between the two guide structures is actually smaller at the media path exit, i.e., near convey roller 140. This is in direct contrast to the limitations of dependent claims 15 and 16, which recite the distance between the first and second guide structures being greater at the media exit (adjacent the drive roller structure) than at the media entrance (adjacent the pick roller structure). Consequently, Applicants believe that the Saikawa reference fails to teach or otherwise suggest the additionally limitations of dependent claims 15 and 16, thereby, rendering claims 15 and 16 allowable.

Claim 17 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Saikawa, and claims 18 and 19 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Saikawa in view of the Walker U.S. Patent No. 5,940,106. Each of claims 17-19 depends from independent claim 14, which, as described above, is not believed to be taught or otherwise suggested by the Saikawa reference. Therefore, each of dependent claims 17-19 in combination with independent claim 14 is also believed to be allowable over the art of record.

Claim 20 is rejected under 35 U.S.C. § 103(a) as being unpatentable over the Saikawa reference in view of the Walker reference, which relates to a resistive media size sensing

system. Independent claim 20 recites an inkjet printer with improved media control to reduce trailing edge defects. The printer of independent claim 20 includes similar limitations as those described above with respect to the media handling system of independent claim 14. In addition, independent claim 20 also recites a pick pinch roller structure arranged relative to the pick roller structure to define a pinch nip therebetween. For similar reasons as described with respect to independent claim 14, Applicants do not believe the Saikawa reference to teach or otherwise suggest the limitations of independent claim 20. In addition, Applicants submit that the Saikawa reference teaches against modification to include the pick pinch roller structure recited in independent claim 20.

In all embodiments of the Saikawa reference, supply roller 111 is positioned with respect to the stack of sheets P such that supply roller 111 has a single point of contact with each sheet P. As such, Saikawa has no reason to include a pick pinch roller. Pick pinch rollers creating nips are typically used to facilitate regular movement including directional change of the sheets about the supply roller 111. More particularly, pinch rollers are typically only used with supply rollers to help guide a particular media sheet around the supply roller, which not only picks the sheet from the media supply tray but also changes the direction of the sheet path. This typical use is the only use of pinch rollers described in the Walker reference. In contrast, supply roller 111 in the Saikawa reference merely contacts the sheet P in one general location to translate the sheet P into the conveyor unit 140 with no directional change. The sheet P is not rotated around supply roller 111. As a result, there is no need to add pinch rollers to guide sheet P around supply roller 111 of the Saikawa reference. Therefore, the Saikawa reference teaches against modifying the inkjet printer disclosed in the Saikawa reference by adding a pick pinch roller structure.

For at least the reasons described above, Applicants submit that the cited reference fails to teach or otherwise suggest the limitations of independent claim 20. Accordingly, independent claim 20 is believed to be allowable.

Claims 21-26 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the Saikawa reference in view of the Walker reference. Each of claims 21-26 depends from independent claim 20, which, as described above, is not taught or otherwise suggested by the cited references. Therefore, each of dependent claims 21-26 in combination with independent claim 20 is also believed to be allowable over the art of record.

Response Under 37 C.F.R. 116

Applicant: Craig D. Sunada et al.

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Title: INNER PAPER GUIDE FOR MEDIA SHAPE CONTROL IN A PRINTER

CONCLUSION

In light of the above, Applicant believes independent claims 14 and 20 and the claims depending therefrom, are in condition for allowance. Allowance of these claims is respectfully requested.

Any inquiry regarding this Response should be directed to James R. McDaniel at Telephone No. (208) 396-4095, Facsimile No. (208) 396-3958. In addition, all correspondence should continue to be directed to the following address:

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CERTIFICATE UNDER 37 C.F.R. 1.8: The undersigned hereby certifies that this paper or papers, as described herein, are being deposited in the United States Postal Service, as first class mail, in an envelope address to: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 28th day of August, 2003.

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